



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,719	07/29/2004	Mark X. Hayden	48972.830026.US0	4718
26582	7590	06/12/2006	EXAMINER	
<b>HOLLAND &amp; HART, LLP</b> P.O BOX 8749 DENVER, CO 80201				CHAMBERS, MICHAEL S
		ART UNIT		PAPER NUMBER
				3711

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/710,719	HAYDEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mike Chambers	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 May 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-9 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-9 and 12-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4-6,8-9 and 12-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Frisch (2596894). Frisch discloses a shaft comprising a first composite material, a head comprising a second composite material, and a transition portion comprising a third composite material, the transition portion coupled to the shaft and the head and providing a seamless transition between the shaft and the head with the shaft having at least one tapered portion and at least one expanding portion (fig 1,2,6,8).

As to claim 2: Frisch discloses the same material (fig 1,2:29-35).

As to claims 4-6: Frisch discloses different materials (4:30-32).

As to claims 8 and 9: Frisch discloses an end stop of the same material (fig 1-2).

As to claim 12: Frisch discloses a head (fig 8). In as much structure set forth by the applicant in the claims, the device is capable of use in the intended manner if so desired).

As to claim 13: Frisch discloses a head offset from the shaft (fig 2).

As to claim 14: Frisch discloses a scoop shape (fig 8).

As to claim 15: Frisch discloses a curved portion (fig 2, item 4).

As to claim 16: See claim 1 rejection.

As to claim 17: See claim 2 rejection.

As to claim 18: See claim 13 rejection.

As to claim 19: Frisch discloses a concave shape (fig 3,9).

As to claim 20: See claim 15 rejection.

Also,

Claims 1-9,12 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Erwin et al (3755037). Erwin discloses a shaft comprising a first composite material, a head comprising a second composite material, and a transition portion comprising a third composite material, the transition portion coupled to the shaft and the head and providing a seamless transition between the shaft and the head with the shaft having at least one tapered portion and at least one expanding portion (fig 1,3, 2:1-5).

As to claim 2: Frisch discloses the same material (fig 1,2:1-5).

As to claims 3 and 7: Frisch discloses carbon fibers (4:5-10).

As to claims 4 and 6: Frisch discloses different materials (3:35-38).

As to claim 5: Frisch discloses a first material (fig 1,2:1-5).

As to claims 8 and 9: Frisch discloses an end stop of the same material (fig 1).

As to claim 12: Frisch discloses a head with two sidewalls,a ball stop connecting a base and lip end (fig 1). In as much structure set forth by the applicant in the claims, the device is capable of use in the intended manner if so desired.

As to claim 14: Frisch discloses a scoop shape (fig 1). In as much structure set forth by the applicant in the claim, the device meets the limitations of the claim.

As to claim 15: Frisch discloses a curved portion (fig 3).

Also,

Claims 1-2,8,9,12, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by McCutchen (20020055403). McCutchen discloses a shaft comprising a first composite material, a head comprising a second composite material, and a transition portion comprising a third composite material, the transition portion coupled to the shaft and the head and providing a seamless transition between the shaft and the head with the shaft having at least one tapered portion and at least one expanding portion (fig 1,paragraph 48).

As to claim 2: McCutchen discloses the same material (fig 1,paragraph 48).

As to claims 8 and 9: McCutchen discloses an end stop of the same material (fig 1).

As to claim 12: McCutchen discloses a head with two sidewalls, a ball stop connecting a base and lip end (fig 1). In as much structure set forth by the applicant in the claims, the device is capable of use in the intended manner if so desired.

As to claim 14: McCutchen discloses a scoop shape (fig 1). In as much structure set forth by the applicant in the claim, the device meets the limitations of the claim.

As to claim 15: McCutchen discloses a curved portion (fig 1). In as much structure set forth by the applicant in the claim, the device meets the limitations of the claim.

Also,

Claims 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Feeney (5685791). Feeney discloses a shaft with an integrated end stop, a head, and a transition portion (fig 9).

As to claim 17: Feeney discloses the same material (fig 9,5:12-17).

As to claim 18: Feeney discloses a head off set along the horizontal axis (fig 9,5:12-17). In as much structure set forth by the applicant in the claim, the device meets the limitations of the claim.

As to claim 19: Feeney discloses a concave shape (fig 3,9). In as much structure set forth by the applicant in the claim, the device meets the limitations of the claim.

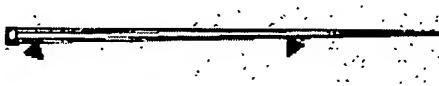
As to claim 20: Feeney discloses a curved shape (fig 9). The first part of the neck is considered part of the shaft and is curved. In as much structure set forth by the applicant in the claim, the device meets the limitations of the claim.

### ***Response to Arguments***

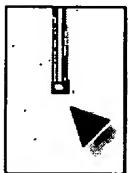
Applicant's arguments filed 5/24/06 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pg 5 last line on the page) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regard to the applicant's assertion that Frisch does not disclose a tapered portion of a shaft or an expanded portion of the shaft, the applicant is directed to Fig 1-2. The shaft is tapered as shown in fig 1 and the butt end of the shaft is "expanded" from the neck portion of the shaft.



With regard to the applicant's assertion that Frisch does not disclose an end stop, the applicant is directed to Fig 1-2, although not numbered, it is clearly an "end stop".



With regard to the applicant's assertion that Feeney does not disclose an end stop, the lack of any structural elements defining an end stop in the claim language fails to limit what can be considered an end stop. Since the examiner has to read the claim in the broadest possible way, the end stop is considered to be the end of the shaft which has the air bladder nipple as noted in 4:33-50 of the Feeney specification. If this feature is "novel" or important to the invention, then it should clearly be defined in terms of structure and novelty in the claim language and the specification.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Chambers whose telephone number is 571-272-4407. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Chambers  
Examiner  
Art Unit 3711

June 7, 2006



EUGENE KIM  
SUPERVISORY PATENT EXAMINER